

CLAIMS

1. A method for measuring a concentration of protein, comprising the steps of:

(a) measuring intensities of at least a transmitted light or a scattered light of a solution to be detected before and after mixing therein one reagent selected from the group consisting of tannin, tannic acid and m-galloyl gallic acid, and

(b) determining a concentration of protein in said solution to be detected based on said intensities.

2. The method for measuring a concentration of protein in accordance with claim 1, comprising a step of:

(a') regulating a pH of a solution to be detected to 1.5 to 5.8 after mixing therein said reagent in said step (a).

3. The method for measuring a concentration of protein in accordance with claim 2,

wherein the pH of the solution to be detected is regulated by adding a pH controlling agent selected from the group consisting of potassium hydrogen phthalate, acetic acid, citric acid and ascorbic acid in said solution to be detected in said step (a').

4. The method for measuring a concentration of protein in accordance with claim 1,

wherein a concentration of a reagent in a solution to be detected after mixing therein said reagent is in the range

of 5×10^{-3} to 5 g/dl in said step (a').

5. The method for measuring a concentration of protein in accordance with claim 1,

wherein the protein concentration in said solution to be detected is determined based on the intensities of said transmitted light and said scattered light in said step (b).

6. The method for measuring a concentration of protein in accordance with claim 5,

wherein a concentration of protein in a solution to be detected in a low concentration range is determined from the intensity of said scattered light, and that of a solution to be detected in a high concentration range is determined from the intensity of said transmitted light.

7. The method for measuring a concentration of protein in accordance with claim 5, comprising a step of:

(c) detecting the presence or absence of an erroneous measurement due to a suspending particle such as a bubble in said solution to be detected by comparing the intensity of said transmitted light with that of said scattered light.

8. A method for measuring a concentration of a solution, comprising the steps of:

(i) measuring intensities of at least a transmitted light or a scattered light of a solution to be detected before and after mixing therein one reagent selected from the group consisting of tannin, tannic acid and m-galloyl gallic acid,

and

(ii) measuring an angle of rotation of said solution to be detected before mixing therein said reagent,

(iii) determining a concentration of protein in said solution to be detected based on the intensities of at least said transmitted light or said scattered light, and

(iv) determining a concentration of any optical active substance in said solution to be detected other than said protein from said concentration of protein and said angle of rotation.

9. The method for measuring a concentration of a solution in accordance with claim 8, comprising a step of:

(i') regulating a pH of said solution to be detected to 1.5 to 5.8 after mixing therein said reagent in said step (i).

10. The method for measuring a concentration of a solution in accordance with claim 10,

wherein the pH of the solution to be detected is regulated by mixing a pH controlling agent selected from the group consisting of potassium hydrogen phthalate, acetic acid, citric acid and ascorbic acid in said solution to be detected.

11. The method for measuring a concentration of a solution in accordance with claim 9,

wherein a concentration of a reagent in a solution to be detected after mixing therein said reagent is in the range of 5×10^{-3} to 5 g/dl in said step (i').

12. A reagent for measuring a concentration of protein to be used in a method for measuring a concentration of protein in which a reagent is mixed in a solution to be detected and a concentration of protein is determined from the resulting turbidity,

wherein said reagent contains at least one selected from the group consisting of tannin, tannic acid and m-galloyl gallic acid.

13. The reagent for measuring a concentration of protein in accordance with claim 12,

wherein the pH thereof is regulated to the range of 1.5 to 5.8.

14. The reagent for measuring a concentration of protein in accordance with claim 12,

wherein said reagent contains one acid selected from the group consisting of potassium hydrogen phthalate, acetic acid, citric acid and ascorbic acid as a pH controlling agent.

15. The reagent for measuring a concentration of protein in accordance with claim 12,

wherein said reagent is an aqueous solution dissolved in water.

16. The reagent for measuring a concentration of protein in accordance with claim 15,

wherein the concentration of said reagent in said aqueous solution is 250 g/dl or lower.

17. The reagent for measuring a concentration of protein in accordance with claim 13,

wherein the concentration of said pH controlling agent is at the highest possible level as long as said pH controlling agent does not deposit in a temperature range operable for said reagent.